

TABLE L-1
Unit Costs

Item	Unit Cost	Units	Source/Comments
Permitting	\$ 35,000	LS	Allowance
Institutional Controls	\$ 25,000	LS	Allowance
LNAPL collection and recycling/disposal	\$ 5,000	yr	Potlatch estimate; current system
LNAPL collection and recycling/disposal	\$ 7,500	yr	Potlatch estimate; new system
Site inspection	\$ 2,000	yr	Estimate
Site maintenance		yr	Varies by alternative
Groundwater monitoring	\$ 10,000	yr	2x/yr for 6 wells at \$800/well, rounded
Annual reporting (Alts A & B)	\$ 5,000	yr	Estimate
Annual reporting (Alts C - G)	\$ 10,000	yr	Estimate
Construction management and quality assurance	\$ 30,000	mo	Estimate
Soil Washing - fixed costs	\$ 520,000	LS	Vendor quote
Soil Washing - variable cost, small qty	\$ 55.00	cy	Vendor quote
Soil Washing - variable cost, med qty	\$ 43.00	cy	Vendor quote
Soil Washing - variable cost, large qty	\$ 30.00	cy	Extrapolated from vendor quote
On-site landfarming	\$ 30.00	cy	Preliminary estimate
Temporary facilities	\$ 6,000	month	Clearcreek Contractors LDA closure bid
Earthworks equipment mob/demob	\$ 25,000	LS	Estimate
Barrier / Collector Trench equipment mob/demob	\$ 50,000	LS	Estimate
Construction entrance	\$ 15.00	sy	WSDOT Unit Bids
Silt fence	\$ 5.00	lf	Clearcreek Contractors LDA closure bid
Silt curtain	\$ 15.00	lf	Estimate
Fence gate	\$ 1,000	ea	Estimate
Cofferdam and sediment control for 350-ft containment	\$ 50,000	LS	Estimate
Cofferdam and sediment control for 1100-ft containment	\$ 100,000	LS	Estimate
Chain-link fencing	\$ 25.00	lf	FenceCo WMW estimate
Excavate and load riprap	\$ 10.00	cy	Means 31 23 23.15 6000
Haul riprap or soil to/from stockpile	\$ 4.00	cy	Means 31 23 23.18 0310
Geosynthetics - remove & fold	\$ 0.05	sf	Estimate
Offsite landfill disposal (haul & dispose)	\$ 81.52	ton	Estimate
Excavate and load soil	\$ 5.00	cy	Estimate
Excavate and load contaminated river sediment	\$ 25.00	cy	Estimate
Spread and compact soil	\$ 1.50	cy	Means 31 23 23.14 3000, 31 23 23.23 5700
Excavate, haul on-site, place & compact soil	\$ 10.50	cy	sum of other unit costs
Clean soil from off-site	\$ 25.00	cy	Estimate, placed
Excavate collector trench	\$ 20.00	cy	Estimate
Excavate cutoff wall trench	\$ 15.00	cy	Estimate
Slurry / Revert Materials in Trench	\$ 250.00	cy	Means 31 56 23.20 0050 and 0100 materials
Gravel (trench, etc.)	\$ 30.00	cy	Estimate
Geotextile	\$ 0.40	sf	Estimate
Trench cover, low permeability	\$ 40.00	cy	Estimate
LNAPL recovery wells	\$ 500	ea	Estimate
Place riprap	\$ 25.00	cy	Means 31 37 13.10 0100 w/o Matls
Riprap from off-site	\$ 65.00	cy	Means 31 37 13.10 0370 Matls + Placement
Topsoil from off-site	\$ 40.00	cy	Estimate
Hydroseeding	\$ 2,500	acre	Estimate
Foundation demolition	\$ 112.50	cy	Means 02 41 16.17 1140
Roadway - subgrade preparation	\$ 0.50	sf	Estimate
Roadway - gravel base course	\$ 40.00	cy	Means 32 11 23.23 1523
Roadway - bituminous stabilized top course	\$ 80.00	cy	Means 32 11 26.19 1100
Roadway - 2-inch asphalt pavement layer	\$ 1.00	sf	Means 32 12 16.13 0380 plus 30% for delivery
Liner for soil storage area	\$ 3.00	sf	Estimate
Labor (fully burdened)	\$ 30.00	hr	Estimate
Backhoe tractor	\$ 250	day	Estimate
Steam cleaning equipment (incl generator)	\$ 500	day	Estimate
LNAPL collection system in ditch	\$ 100	lf	Estimate
River boom support posts	\$ 1,000	ea	Estimate
River boom fabric, incl. reinforcement and support	\$ 5.00	sf	Estimate, incl installation
Concrete, including forms, reinforcement	\$ 1,000	cy	Estimate
Sheet Piling	\$ 15.00	sf	Means 31 41 16.10 1200

NOTES:

Means = RS Means Heavy Construction Cost Data 2007